

S/N 10/683,785

Response to Office Action Dated 07/22/2005

MODIFICATIONS TO CLAIM STATUS

By way of overview, claims 1—24 are currently pending. Of these pending claims:

- A) Claims 1—10 and 17—24 remain in their original form; and
- 5 B) Claims 11—16 are currently withdrawn.

Listing of Claims

1. (original) A multicolor-printer, comprising:
 - a plurality of print stations arranged to generate an image on a recording
 - 10 medium during the movement of the recording medium;
 - a recording medium conveyor;
 - a plurality of similar first encoding marks arranged along the conveyor,
 - sensor arrangements associated with the print stations, responsive to the
 - first encoding marks and arranged to generate signals providing information
 - 15 about the movement of the conveyor with respect to the corresponding print
 - station;
 - at least one index marking indicative of a reference position of the
 - conveyor;
 - wherein the sensor arrangements are arranged to generate a signal
 - 20 responsive to the index marking, thereby providing information about the
 - reference position of the conveyor with respect to the corresponding print station;
 - and
 - wherein the printer is arranged to register images of different print stations
 - with each other based on the movement and reference-position information.

S/N 10/683,785

Response to Office Action Dated 07/22/2005

2. (original) The multicolor-printer of claim 1, further comprising second encoding marks associated with the conveyor and inclined to the first encoding marks;

5 the sensor arrangements being arranged to also generate second signals from the second encoding marks, wherein the first and second signals are related and their relation bears information about a conveyor displacement in a lateral direction with respect to the corresponding print station; and

wherein the printer is arranged to register images of different print stations
10 with each other based on the movement and lateral-displacement information.

3. (original) The multicolor-printer of claim 1, arranged to count the encoding marks starting with the detection of the index marking at each print station;

15 start to print an image, by the first print station, and record a corresponding encoding-mark count of the first print station;

start to print an image, by a subsequent print station in response to equality of the subsequent print station's encoding-mark count and the recorded first print station's encoding-mark count.

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4. (original) The multicolor-printer of claim 1, wherein at least one of the first encoding marks and the at least one index marking are provided on an encoder section at an edge of the conveyor .

S/N 10/683,785

Response to Office Action Dated 07/22/2005

5. (original) The multicolor-printer of claim 1, wherein at least one of the first encoding marks and the at least one index marking are applied to the conveyor by etching or are attached to the conveyor on a strip.

5 6. (original) The multicolor-printer of claim 1, wherein the sensor arrangements are attached to their respective print stations.

7. (original) The multicolor-printer of claim 1, wherein the sensor arrangements comprises a first encoder sensor and an index-marking sensor.

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8. (original) The multicolor-printer of claim 1, wherein the printer is an ink-jet printer.

9. (original) The multicolor-printer of claim 1, wherein the printer is a
15 page-width printer.

10. (original) The multicolor-printer of claim 1, wherein the printer is a large-format printer.

20 11. (withdrawn) A multicolor-printer, comprising:
a plurality of print stations arranged to generate an image on a recording medium;
a conveyor arranged to move the recording medium in an advance direction;

S/N 10/683,785

Response to Office Action Dated 07/22/2005

a plurality of similar first encoding marks arranged along the conveyor,
sensor arrangements associated with the print stations, responsive to the
first encoding marks and arranged to generate first signals providing information
about the advance movement of the conveyor with respect to the corresponding
5 print station;

second encoding marks inclined to the first encoding marks;
wherein the sensor arrangements are arranged to also generate second
signals from the second encoding marks, wherein the first and second signals are
related and their relation bears information about a conveyor displacement in a
10 lateral direction with respect to the corresponding print station; and

wherein the printer is arranged to register images of different print stations
with each other based on the movement and lateral-displacement information.

12. (withdrawn) The multicolor-printer of claim 11, further comprising at
15 least one index marking indicative of a reference position of the conveyor;

wherein the sensor arrangements are arranged to also generate a signal
responsive to the index marking, thereby providing information about the
reference position of the conveyor with respect to the corresponding print station;
and

20 wherein the printer is arranged to register images of different print stations
with each other in the advance direction based on the movement and reference-
position information.

13. (withdrawn) The multicolor-printer of claim 11, wherein the second

S/N 10/683,785

Response to Office Action Dated 07/22/2005

encoding marks are inclined to the lateral direction at an angle of approximately 45°.

14. (withdrawn) The multicolor-printer of claim 11, wherein the first
5 encoding marks and the second encoding marks are provided on an encoder section at an edge of the conveyor.

15. (withdrawn) The multicolor-printer of claim 11, wherein the sensor
arrangements are attached to their respective print stations.
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16. (withdrawn) The multicolor-printer of claim 11, wherein the sensor
arrangements comprises a first and a second encoder sensor.

17. (original) A method of printing images onto each other on a recording
15 medium using a printer having a plurality of print stations and a recording medium conveyor equipped with a plurality of similar first encoding marks and at least one index marking indicative of a reference position of the conveyor, comprising:

moving the conveyor in an advance direction, thereby detecting the index
20 marking and the encoding marks and counting the encoding marks starting with the detection of the index marking at each print station;

starting to print an image, by the first print station, and recording a
corresponding encoding-mark count of the first print station;

starting to print an image, by a subsequent print station in response to

S/N 10/683,785

Response to Office Action Dated 07/22/2005

equality of the subsequent print station's encoding-mark count and the recorded first print station's encoding-mark count.

18. (original) The method of claim 17, wherein the first print station's recorded encoding-mark count and the equal subsequent print station's recording-mark count correspond to an image reference position which passes the print stations before they actually start to print.

19. (original) The method of claim 17, wherein the recording medium conveyor is also equipped with second encoding marks inclined to the first encoding marks, further comprising:

detecting the first and second encoding marks at each print station while moving the conveyor to print images on the recording medium, wherein detection signals of the first and second encoding marks are related and their relation bears information about a relative lateral conveyor displacement with respect to the corresponding print station, so as to obtain printing-station-related movement and lateral-displacement information; and

registering the images also based on the lateral-displacement information.

20. (original) A method of printing images onto each other on a recording medium using a printer having a plurality of print stations and a recording medium conveyor equipped with a plurality of similar first encoding marks and at least one index marking indicative of a reference position of the conveyor, comprising the steps of:

S/N 10/683,785

Response to Office Action Dated 07/22/2005

calibrating the distance between the print stations with reference to the encoding marks by moving the conveyor in an advance direction and detecting the at least one index marking, when moved past the print stations, while detecting the corresponding encoding marks;

5 moving the conveyor to print images on the recording medium while detecting the encoding marks at each print station, so as to obtain printing-station-related movement information; and

registering the images being printed by the different print stations with each other based on the movement information and using the distance calibration.

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21. (original) The method of claim 20, wherein the recording medium conveyor is also equipped with second encoding marks inclined to the first encoding marks, further comprising:

15 detecting the first and second encoding marks at each print station while moving the conveyor to print images on the recording medium, wherein detection signals of the first and second encoding marks are related and their relation bears information about a relative lateral conveyor displacement with respect to the corresponding print station, so as to obtain printing-station-related movement and lateral-displacement information; and

20 registering the images also based on the lateral-displacement information.

22. (original) A method of printing images onto each other on a recording medium using a printer having a plurality of print stations and a recording medium conveyor equipped with a plurality of first and second encoding marks,

S/N 10/683,785

Response to Office Action Dated 07/22/2005

wherein the second encoding marks are inclined to the first encoding marks, comprising the steps of:

moving the conveyor to print images on the recording medium while detecting the first and second encoding marks at each print station, wherein
5 detection signals of the first and second encoding marks are related and their relation bears information about a relative lateral conveyor displacement with respect to the corresponding print station, so as to obtain printing-station-related movement and lateral-displacement information; and

registering the images being printed by the different print stations with each
10 other based on the movement and lateral-displacement information.

23. (original) The method of claim 22, wherein the recording medium conveyor is also equipped with at least one index marking indicative of a reference position of the conveyor, further comprising:

15 upon moving the conveyor, detecting the index marking and counting at least the first encoding marks starting with the detection of the index marking at each print station;

starting to print an image, by the first print station, and recording a corresponding encoding-mark count of the first print station;

20 starting to print an image, by a subsequent print station in response to equality of the subsequent print station's encoding-mark count and the recorded first print station's encoding-mark count.

24. (original) The method of claim 22, wherein the recording medium

S/N 10/683,785

Response to Office Action Dated 07/22/2005

conveyor is also equipped with at least one index marking indicative of a reference position of the conveyor, further comprising:

calibrating the distance between the print stations with reference to the first encoding marks by moving the conveyor in an advance direction and detecting
5 the at least one index marking, when moved past the print stations, while detecting the corresponding first encoding marks;

moving the conveyor to print images on the recording medium while detecting the first and second encoding marks at each print station, so as to obtain also printing-station-related movement information; and

10 registering the images being printed by the different print stations with each other in the movement direction based on the movement information and using the distance calibration.